



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

|  |             |                      |                     |                  |
|--|-------------|----------------------|---------------------|------------------|
| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/576,472   | 04/20/2006  | Tatsuo Matsuoka      | 289997US2PCT        | 7211             |
| 22850  | 7590        | 07/23/2009           |                     |                  |
| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.<br>1940 DUKE STREET<br>ALEXANDRIA, VA 22314 |             |                      |                     |                  |
| EXAMINER   |             |                      |                     |                  |
| CHAN, KAWING   |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 2837   |             |                      |                     |                  |
| NOTIFICATION DATE  |             | DELIVERY MODE        |                     |                  |
| 07/23/2009   |             | ELECTRONIC           |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com

oblonpat@oblon.com

jgardner@oblon.com

# Office Action Summary

**Application No.**

10/576,472

**Applicant(s)**

MATSUOKA, TATSUO

**Examiner**

Kawing Chan

**Art Unit**

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. The Amendments and Applicant Arguments submitted on 05/18/09 have been received and its contents have been carefully considered. The examiner wishes to thank the Applicant for the response to the Examiner's action and for amending the claims in the appropriate manner.

Claims 1-14 are pending for examination.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrar et al. (US 4,832,158) in view of Angst (WO 03/004397) (all the rejections below are based on Angst et al. US 7,117,979 B2, the equivalent translation of Angst WO 03/004397) and Malone, Jr. (US 6,630,886 B2).

In Re claims 1 and 7, with reference to Figure 1, Farrar discloses an elevator apparatus comprising an elevator control apparatus having an operation control portion (CLC) that controls an actual speed of a car (Col 15 lines 1-31), wherein when the supervising portion (selector) performs an initial setting (setup) to set a relationship between a signal from a supervision position sensor (selector) and a position of the car in an initial operation mode (i.e. measure distance between floors during elevator runs and the floor height) (Col 11 lines 41-54).

Farrar fails to disclose the supervising portion detects abnormalities in the movement of the car, and it also fails to disclose the speed of the car is slower in initial setting than in normal operation mode.

However, with reference to Figure 1A), Angst discloses a supervising portion (24) that detects abnormalities (overspeed) in the movement of the car (Col 4 lines 45-48).

Nevertheless, Malone discloses the speed of the car is slower in initial setting (special operation: inspection or maintenance) than in normal operation mode (Col 1 lines 10-24).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Farrar with the teachings of Angst and Malone, since it is known in the art to utilize a monitoring device to detect the speed of an elevator so as to be able to apply braking to the elevator in an overspeed condition, and it is also known in the art to operate the elevator at a lower rated speed when the elevator is operated under special operation (e.g. inspection or maintenance) so as to be able to increase the safety level of the elevator operation.

In Re claims 2 and 8, with reference to Figures 6 and 9, Angst teaches the supervising portion (24.1 & 24.2) outputs a permission signal (when speed below the speed limit value graph) to the operation control portion regarding the actual speed of the car to be controlled by the operation control portion (Col 4 lines 15-26 & Col 7 lines 34-46).

In Re claims 3 and 9, Angst discloses a plurality of operation modes of an elevator (i.e. ramping operation, inspection, error mode, etc), and different speed limit value graphs will be produced dependent on the operation mode (Col 2 line 66 to Col 3 line 14 & Col 5 line 47 to Col 6 line 9). Therefore, Angst inherently discloses the operation control portion of the elevator can selectively change the current operation mode between a plurality of operation modes.

In Re claims 4 and 10, with reference to Figures 8 and 9, Angst teaches the supervising portion (24) comprises an emergency terminal speed-limiting device (24.2) configured to forcibly decelerate and stop the car when the car approaches a vicinity of a terminal landing at a speed higher (46-48) than a preset speed (29) (Col 7 line 28 to Col 8 line 3).

In Re claims 6 and 12, Farrar teaches the supervising portion (CLC & selector) determines the relationship between the supervision position sensor (selector:

determines distance between floors) and the position of the car (floor height) in the initial setting (setup), and when the elevator runs in normal operation, the elevator system determines whether the elevator is at the slowdown point or at the target floor based on the data collected from the initial setting (Col 11 line 55 to Col 12 line 21). And, with reference to Figure 9, Angst further discloses a control position sensor (21) and a supervision position sensor (21) connected to the supervising portion (24.2) for detecting a position of the car (8) within a hoistway (Col 8 lines 14-17).

In Re claims 13 and 14, Angst teaches speed limit value graphs (28) which are stored in the speed monitoring device (24), and the limit values are set to be higher than normal rated speed (27) of the car at each position in the travel way (Figure 3) so that the supervision portion is configured to detect the abnormalities based on the limit values. As we have discussed above, Farrar teaches the supervising portion (CLC & selector) determines the relationship between the supervision position sensor (selector: determines distance between floors) and the position of the car (floor height) in the initial setting (setup), and when the elevator runs in normal operation, the elevator system determines whether the elevator is at the slowdown point or at the target floor based on the data collected from the initial setting (Col 11 line 55 to Col 12 line 21).

Thus, the data collected from the initial setting is substantially the same as the normal rated speed of the car in the travel way. While Angst teaches the speed limit value graphs used to detect abnormalities of the elevator are set to be related to the normal rated speed of the elevator, it would have been obvious to one having ordinary

skill in the art to use data collected from the initial setting to set the speed limit for the elevator at each position of travel way during normal operation with reasonable expectation of success.

4. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrar et al. (US 4,832,158) in view of Angst (WO 03/004397) (all the rejections below are based on Angst et al. US 7,117,979 B2, the equivalent translation of Angst WO 03/004397) and Malone, Jr. (US 6,630,886 B2) as applied to claims 1 and 7 above, and further in view of Mueller (US 2004/0079591 A1).

In Re claims 5 and 11, Farrar, Angst and Malone have been discussed above, but they fail to disclose the shortened buffer and the control portion causes the car to travel at a speed equal to or lower than a permissible collision speed of the shortened buffer.

However, with reference to Figures 1 and 4, Mueller discloses the use of reduced nominal speed (RG) in the end area of the shaft would enable the installation of a shortened buffer (smaller shaft pit and shaft head) (Paragraph [0011]), and wherein the operation control portion (2) causes the car to travel at a speed equal to or lower than a permissible collision speed of the shortened buffer (with the use of the reduced nominal speed RG at each shaft end) in performing initial setting of the supervising portion (monitored by the safety device) (Paragraph [0073]).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Farrar, Angst and

Malone with the teachings of Mueller, since it is known in the art to utilize reduced speed limit at the shaft end so that smaller buffers will be needed (Paragraph [0011]).

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Uetani and Mandel et al. are further cited to show related teachings in the art.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kawing Chan whose telephone number is (571)270-3909. The examiner can normally be reached on Mon-Fri 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BENTSU RO/  
Primary Examiner, Art Unit 2837

Kawing Chan  
Examiner  
Art Unit 2837